Abstract:

The present invention relates to a process for preparing a key intermediate of cefprozil and use of this intermediate in the preparation of cefprozil thereby avoiding impurity-causing self-acylation.

[R-(Z)]-[4-hydroxy-α-[(3-methoxy-1-methyl-3-oxo-1-propenyl)amino]] benzeneacetic acid, mono potassium salt is reacted with ethyl chloroformate to obtain mixed anhydride which is then silylated with *N,O*-bis(trimethylsilyl)acetamide. The silylated compound obtained is reacted with [7-trimethylsilylamino-3-(Z/E-propen-1-yl)-3-cephem-4-carboxylic acid]trimethylsilyl ester and deprotected with aqueous hydrochloric acid to give cefprozil.